



COPY OF PAPERS
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SEQUENCE LISTING

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<120> ATP-DIPHOSPHOHYDROLASES, PROCESS OF PURIFICATION
THEREOF AND PROCESS OF PRODUCING THEREOF BY RECOMBINANT
TECHNOLOGY

<130> 920333.90019

<140> 09/781,796

<141> 2001-02-12

<150> 08/419,204

<151> 1995-04-10

<150> CA96/00223

<151> 1996-04-10

<150> 08/930,921

<151> 1998-02-01

<160> 8

<170> PatentIn Ver. 2.1

<210> 1

<211> 510

<212> PRT

<213> Homo sapiens

<400> 1

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			20					25					30		

Leu	Ala	Val	Gly	Leu	Thr	Gln	Asn	Lys	Ala	Leu	Pro	Glu	Asn	Val	Lys
			35					40					45		

Tyr	Gly	Ile	Val	Leu	Asp	Ala	Gly	Ser	Ser	His	Thr	Ser	Leu	Tyr	Ile
			50				55				60				

Tyr	Lys	Trp	Pro	Ala	Glu	Lys	Glu	Asn	Asp	Thr	Gly	Val	Val	His	Gln
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

65		70		75		80
Val Glu Glu Cys Arg Val Lys Gly Pro Gly Ile Ser Lys Phe Val Gln						
	85		90		95	
Lys Val Asn Glu Ile Gly Ile Tyr Leu Thr Asp Cys Met Glu Arg Ala						
	100		105		110	
Arg Glu Val Ile Pro Arg Ser Gln His Gln Glu Thr Pro Val Tyr Leu						
	115		120		125	
Gly Ala Thr Ala Gly Met Arg Leu Leu Arg Met Glu Ser Glu Glu Leu						
	130		135		140	
Ala Asp Arg Val Leu Asp Val Val Glu Arg Ser Leu Ser Asn Tyr Pro						
	145		150		155	160
Phe Asp Phe Gln Gly Ala Arg Ile Ile Thr Gly Gln Glu Glu Gly Ala						
		165		170		175
Tyr Gly Trp Ile Thr Ile Asn Tyr Leu Leu Gly Lys Phe Ser Gln Lys						
	180		185		190	
Thr Arg Trp Phe Ser Ile Val Pro Tyr Glu Thr Asn Asn Gln Glu Thr						
	195		200		205	
Phe Gly Ala Leu Asp Leu Gly Gly Ala Ser Thr Gln Val Thr Phe Val						
	210		215		220	
Pro Gln Asn Gln Thr Ile Glu Ser Pro Asp Asn Ala Leu Gln Phe Arg						
	225		230		235	240
Leu Tyr Gly Lys Asp Tyr Asn Val Tyr Thr His Ser Phe Leu Cys Tyr						
		245		250		255
Gly Lys Asp Gln Ala Leu Trp Gln Lys Leu Ala Lys Asp Ile Gln Val						
	260		265		270	
Ala Ser Asn Glu Ile Leu Arg Asp Pro Cys Phe His Pro Gly Tyr Lys						
	275		280		285	
Lys Val Val Asn Val Ser Asp Leu Tyr Lys Thr Pro Cys Thr Lys Arg						
	290		295		300	
Phe Glu Met Thr Leu Pro Phe Gln Gln Phe Glu Ile Gln Gly Ile Gly						
	305		310		315	320
Asn Tyr Gln Gln Cys His Gln Ser Ile Leu Glu Leu Phe Asn Thr Ser						

Ala Cys Gly Ala Gly Gly Ala Ala Ala Gly Ala Gly Gly Ala Gly Gly
 35 40 45

Ala Ala Ala Ala Cys Ala Ala Ala Ala Gly Cys Thr Gly Cys Thr Ala
 50 55 60

Cys Thr Thr Ala Thr Gly Gly Ala Ala Gly Ala Thr Ala Cys Ala Ala
 65 70 75 80

Ala Gly Gly Ala Gly Thr Cys Thr Ala Ala Cys Gly Thr Gly Ala Ala
 85 90 95

Gly Ala Cys Ala Thr Thr Thr Thr Gly Cys Thr Cys Cys Ala Ala Gly
 100 105 110

Ala Ala Thr Ala Thr Cys Cys Thr Ala Gly Cys Cys Ala Thr Cys Cys
 115 120 125

Thr Thr Gly Gly Cys Thr Thr Cys Thr Cys Cys Thr Cys Thr Ala Thr
 130 135 140

Cys Ala Thr Ala Gly Cys Thr Gly Thr Gly Ala Thr Ala Gly Cys Thr
 145 150 155 160

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Thr Gly Ala Cys Cys Cys Ala Gly Ala Ala Cys Ala Ala Ala Gly Cys
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Ala Thr Thr Gly Cys Cys Ala Gly Ala Ala Ala Ala Cys Gly Thr Thr
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Ala Ala Gly Thr Ala Thr Gly Gly Gly Ala Thr Thr Gly Thr Gly Cys
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 225 230 235 240

Thr Cys Ala Cys Ala Cys Ala Ala Gly Thr Thr Thr Ala Thr Ala Cys
 245 250 255

Ala Thr Cys Thr Ala Thr Ala Ala Gly Thr Gly Gly Cys Cys Ala Gly
 260 265 270

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 275 280 285

Cys Ala Cys Ala Gly Gly Cys Gly Thr Gly Gly Thr Gly Cys Ala Thr
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Cys Ala Ala Gly Thr Ala Gly Ala Ala Gly Ala Ala Thr Gly Cys Ala
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Gly Gly Gly Thr Thr Ala Ala Ala Gly Gly Thr Cys Cys Thr Gly Gly
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Ala Ala Thr Cys Thr Cys Ala Ala Ala Ala Thr Thr Thr Gly Thr Thr
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Cys Ala Gly Ala Ala Ala Gly Thr Ala Ala Ala Thr Gly Ala Ala Ala
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 370 375 380

Thr Gly Ala Thr Thr Gly Cys Ala Thr Gly Gly Ala Ala Ala Gly Ala
 385 390 395 400

Gly Cys Thr Ala Gly Gly Gly Ala Ala Gly Thr Gly Ala Thr Thr Cys
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Cys Ala Ala Gly Gly Thr Cys Cys Cys Ala Gly Cys Ala Cys Cys Ala
 420 425 430

Ala Gly Ala Gly Ala Cys Ala Cys Cys Cys Gly Thr Thr Thr Ala Cys
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 465 470 475 480

Gly Ala Thr Gly Gly Ala Ala Ala Gly Thr Gly Ala Ala Gly Ala Gly
 485 490 495

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 580 585 590
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 595 600 605
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 610 615 620
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 625 630 635 640
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 645 650 655
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 660 665 670
 Ala Ala Cys Cys Ala Ala Thr Ala Ala Thr Cys Ala Gly Gly Ala Ala
 675 680 685
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 690 695 700
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 705 710 715 720
 Thr Ala Cys Ala Cys Ala Ala Gly Thr Cys Ala Cys Thr Thr Thr Thr
 725 730 735
 Gly Thr Ala Cys Cys Cys Cys Ala Ala Ala Ala Cys Cys Ala Gly Ala
 740 745 750
 Cys Thr Ala Thr Cys Gly Ala Gly Thr Cys Cys Cys Cys Ala Gly Ala
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 770 775 780
 Cys Gly Cys Cys Thr Cys Thr Ala Thr Gly Gly Cys Ala Ala Gly Gly
 785 790 795 800

Ala Cys Thr Ala Cys Ala Ala Thr Gly Thr Cys Thr Ala Cys Ala Cys
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Ala Cys Ala Thr Ala Gly Cys Thr Thr Cys Thr Thr Gly Thr Gly Cys
 820 825 830

Thr Ala Thr Gly Gly Gly Ala Ala Gly Gly Ala Thr Cys Ala Gly Gly
 835 840 845

Cys Ala Cys Thr Cys Thr Gly Gly Cys Ala Gly Ala Ala Ala Cys Thr
 850 855 860

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 865 870 875 880

Gly Thr Thr Gly Cys Ala Ala Gly Thr Ala Ala Thr Gly Ala Ala Ala
 885 890 895

Thr Thr Cys Thr Cys Ala Gly Gly Gly Ala Cys Cys Cys Ala Thr Gly
 900 905 910

Cys Thr Thr Thr Cys Ala Thr Cys Cys Thr Gly Gly Ala Thr Ala Thr
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Ala Ala Gly Ala Ala Gly Gly Thr Ala Gly Thr Gly Ala Ala Cys Gly
 930 935 940

Thr Ala Ala Gly Thr Gly Ala Cys Cys Thr Thr Thr Ala Cys Ala Ala
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Gly Ala Cys Cys Cys Cys Cys Thr Gly Cys Ala Cys Cys Ala Ala Gly
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Cys Cys Cys Ala Gly Thr Gly Thr Gly Cys Cys Thr Thr Cys Ala Ala
 1090 1095 1100

Thr Gly Gly Gly Ala Thr Thr Thr Thr Cys Thr Thr Gly Cys Cys Ala
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Cys Cys Ala Cys Thr Cys Cys Ala Gly Gly Gly Gly Gly Ala Thr Thr
 1125 1130 1135

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 1365 1370 1375

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 1395 1400 1405

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Ala Thr Thr Cys Ala Ala Thr Ala Thr Cys Cys Thr Thr Thr Gly Cys
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Cys Thr Cys Ala Ala Gly Gly Ala Cys Thr Thr Cys Gly Gly Cys Ala
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1810 1815

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<212> PRT
<213> Bovine

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1 5 10

<210> 4
<211> 5
<212> PRT
<213> Bovine

<400> 4
Leu Leu Arg Met Glu
1 5

<210> 5
<211> 13
<212> PRT
<213> Bovine

<220>
<221> UNSURE
<222> (8)
<223> Xaa, where Xaa = any amino acid

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<210> 6
<211> 10
<212> PRT
<213> Bovine

<400> 6
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1 5 10

<210> 7
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<212> PRT
<213> Porcine

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Ser Thr Gln

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<211> 16
<212> PRT
<213> Human and bovine

<400> 8
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